

APPENDIX F

Air Force
Technical Manual
Contract Requirements
(TMCR)

TM 86-01E

Date _____

(Program/Modification/Military System)

ATTACHMENT _

TO

CDRL SEQUENCE NUMBER _____

E X H I B I T

REQUEST FOR PROPOSAL/CONTRACT: _____

Note: Completion of this cover page and associated tables and matrices is required. Complete package is then cited on and attached to the CDRL or contract.

Technical Manual/Technical Order requirements contained herein have been cleared for use by OMB No. 0704-0188, 21 July 1986.

TM TYPE AND DELIVERY REQUIREMENTS

TM type selection tables

Table 1	TM Type Selection Table	<u>Yes/Deleted</u>
Table 2	Updates/Supplements Table	<u>Yes/Deleted</u>

TM delivery requirements matrices

Matrix 1	TM Delivery Requirements	<u>Yes/Deleted</u>
Matrix 2	CM Delivery Requirements	<u>Yes/Deleted</u>

Reproduction media delivery type codes:

- C- Direct Image Copy (DIC).
- D- Digital delivery only:
 - 1. Native (word-processor)
 - 2. Standard Generalized Mark-up Language (SGML).
 - 3. Indexed Portable Document Format (IPDF) File.
 - 4. Postscript.
 - 5. Other _____.
- M- Mixed delivery; DIC and digital (D-__).
- S- Source data only.

Note: Mark the above selections (Yes/Deleted) after indicating the applicable specifications (Yes or No) and delivery type media in the following tables and matrices. For additional interface requirements see the program specific Government Concept of Operation (GCO) and DoD 5000.2-R.

PART A - TM TYPE SELECTION TABLES

TABLE 1
TM TYPE REQUIREMENTS FOR THE (System/Equipment)

<u>Title or Type of Manuals</u>	<u>Specification</u>	<u>Will be Prepared (Yes/No)</u>	<u>Delivery Type</u>
1. Inspection TOs	MIL-M-5096		
a. Inspection and Maintenance Requirements (-6) Manual		_____	_____
b. Acceptance and Functional Check Flight (FCF) Procedures (-6CF) Manual.....		_____	_____
c. Acceptance and Functional Check Flight (-6CL) Checklist		_____	_____
d. Workcards		_____	_____
e. Inspection Requirements Cards		_____	_____
f. Flow/Sequence Charts.....		_____	_____
g. Checklists			
(1) Maintenance/Operations (Non-Aircrew).....		_____	_____
(2) Operations (Aircrew).....		_____	_____
2. Cargo Aircraft Loading and Offloading TOs	MIL-M-5288		
a. Manual.....		_____	_____
b. Checklists		_____	_____
3. Weight and Balance (Aircraft)	MIL-M-5920		
a. Loading Data Manual		_____	_____
b. Sample Basic Weight Checklists.....		_____	_____
4. Flight Manuals (see notes)	MIL-M-7700		
a. Flight Manual		_____	_____
b. Performance Data Manual		_____	_____
5. List of Applicable Publications	MIL-L-8031	_____	_____
6. Structural Repair Manuals (for Aircraft).....	MIL-M-9854.....	_____	_____
7. Munitions/Weapons Loading Procedures, Non-nuclear and Nuclear.....	MIL-M-9977		
a. Nuclear Weapons Basic Information and Loading Procedures		_____	_____
b. Nuclear Weapons Loading Procedures		_____	_____

PART A - TM TYPE SELECTION TABLES

<u>Title or Type of Manuals</u>	<u>Specification</u>	<u>Will be Prepared (Yes/No)</u>	<u>Delivery Type</u>
c. Non-nuclear Munitions Basic.....		___	___
d. Non-nuclear Loading Procedures.....		___	___
e. Integrated Combat Turnaround Procedures.....		___	___
f. Non-nuclear Munitions Loading Standard Data Packages (SDPs).....		___	___
g. Loading Procedures Checklists		___	___
h. Integrated Loading Procedures Checklists		___	___
i. Nuclear Weapons Loading Procedure Checklists.....		___	___
j. Integrated Combat Turnaround Procedures Checklists.....		___	___
k. NATO Stage B Cross-Servicing Checklists.....		___	___
<hr/>			
8. Operation and Maintenance (O&M) Instructions (MTS and Part Task Trainers)	MIL-M-9994		
a. Single Manual.....		___	___
b. Single Manual w/IPB		___	___
c. General Manual		___	___
d. System Trainer Manual		___	___
e. System Trainer Manual w/IPB		___	___
f. Part Task Trainer Manual		___	___
<hr/>			
9. Loading and Transport of Nuclear Weapons Cargo in Cargo Aircraft	MIL-M-25802		
a. Manual.....		___	___
b. Checklists		___	___
<hr/>			
10. Nuclear and Non-nuclear Weapon Delivery and Aircrew Procedures Manuals and Checklists	MIL-M-38384		
a. Non-nuclear Weapon Delivery Manual (Strategic Bomber & Tactical Aircraft)		___	___
b. Nuclear Bomb Delivery Manual (Strategic Bomber Aircraft).....		___	___
c. Aircrew Nuclear Weapon Delivery Manual (Strategic Bomber Aircraft)		___	___

PART A - TM TYPE SELECTION TABLES

<u>Title or Type of Manuals</u>	<u>Specification</u>	<u>Will be Prepared (Yes/No)</u>	<u>Delivery Type</u>
d. Aircrew Nuclear Weapon Delivery Manual (Tactical Aircraft)		_____	_____
e. Non-nuclear Weapon Delivery Checklist (Strategic Bomber & Tactical Aircraft)		_____	_____
f. Nuclear Bomb Delivery Checklist (Strategic Bomber Aircraft).....*		_____	_____
g. Aircrew Nuclear Weapon Delivery Checklist (Tactical Aircraft)*		_____	_____
h. Non-nuclear Weapon Delivery Source Data Packages.....		_____	_____
11. Air Refueling Procedures	MIL-M-3 84 13		
a. Manual		_____	_____
b. Checklist.....		_____	_____
12. Work Unit Code Manual.....	MIL-M-38769.....	_____	_____
13. Calibration Procedures	MIL-M-38793.....	_____	_____
14. Time Compliance Technical Orders (TCTOs).....	MIL-T-38804.....	_____	_____
15. Illustrated Parts Breakdown	MIL-PRF-38807	_____	_____
16. On-Equipment Organizational Maintenance Manual Set	MIL-M-83495		
a. General Vehicle (GV) Manual		_____	_____
b. General System (GS) Manuals		_____	_____
c. Combined GV & GS Manual		_____	_____
d. Job Guide (JG) Manuals		_____	_____
e. Fault Reporting (FR) Manual		_____	_____
f. Fault Isolation (FI) Manual		_____	_____
g. Wiring Data (WD) Manual..		_____	_____
h. Schematic Diagram (SD) Manual		_____	_____
17. Operation and Maintenance Instructions in Work Package Format	MIL-PRF-87929		
a. Maintenance Manuals			
(1) Intermediate Maintenance		_____	_____

PART A - TM TYPE SELECTION TABLES

<u>Title or Type of Manuals</u>	<u>Specification</u>	<u>Will be Prepared (Yes/No)</u>	<u>Delivery Type</u>
(2) Depot Maintenance.....		___	___
(3) Combined (I&D) Maintenance.....		___	___
(4) On Condition Maintenance		___	___
b. Operation & Maintenance Instruction Manuals		___	___
c. Special Manuals			
(1) Aircraft Engine Testing and Trending Procedures.....		___	___
(2) Aircraft Power Package Testing Procedures		___	___
(3) Static Firing of Missile Motors.....		___	___
(4) System Peculiar Corrosion Control		___	___
(5) Nondestructive Inspection (NDI)		___	___
(6) Aircraft Structural Integrity Program (ASIP).....		___	___
(7) ATE Operator Test Procedures		___	___
(8) Special Requirements for Storage and Maintenance Procedures; AUR Munitions/ Launchers and Associated Support Equipment, Conventional Components and CMBR Agents		___	___
(9) Parachute Packing Procedures.....		___	___
(10) Operators Instructions (Hand-Held Flight Computers)		___	___
(11) Installation-Engineering Facility (Ground C-E Equipment)		___	___
d. Checklists (IAW MIL-M-5096)		___	___
e. With Illustrated Parts Breakdown (see notes)		___	___
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18. Commercial Manual (Evaluate according to: MIL-HDBK-1221)		___	___
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Notes:

- Manuals delivered using this table and DI-TMSS-80067, CFAE/CFE Notices, must be reviewed and approved by the Air Force prior to delivery.
- IPBs are developed IAW MIL-PRF-38807, except that MIL-PRF-87929 will also be used for IPBs combined with work packages. MIL-STD-38784 is being modified to allow 38784-formatted books with an IPB chapter.

PART A - TM TYPE SELECTION TABLES

- All Checklists, except aircrew and nuclear weapons checklists, are developed IAW MIL-PRF-5096.

PART A - TM TYPE SELECTION TABLES**TABLE 2****UPDATES, SUPPLEMENTS AND SUPPLEMENTAL MANUALS TO EXISTING TOS AND COMMERCIAL TMS**

<u>Title or Type of Manuals</u>	<u>Specification</u>	<u>Delivery Type</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		

PART A - TM TYPE SELECTION TABLES

<u>Title or Type of Manuals</u>	<u>Specification</u>	<u>Delivery Type</u>
15.		
16.		
17.		
18.		
19.		
20.		

NOTES:

- For commercial manual supplemental data only, under specification, enter "same style and format," "MIL-STD-38784," or MIL-PRF-38807 (for IPB-type data).

PART B - TM DELIVERY REQUIREMENTS MATRICES

MATRIX 1

TM DELIVERY REQUIREMENTS MATRIX FOR (Systems/Items)

DELIVERY SCHEDULE				
Event ⇨ Enter number of days data required prior to event ⇨	In-Process Review (_ _ Days)	Verification (_ _ Days)	Prepublicatio n Review (_ _ Days)	Reproductio n Media (_ _ Days)
Enter Office Symbol and Address a	Enter Copy Quantities Required ⇩ ⇩ ⇩ ⇩			
Total Copies Required:				

NOTE : Deliverables include TM, Source Data, Updates, and Supplements as required. TCTO requirements are specified in the contract vehicle approving the TCTO.

PART B - TM DELIVERY REQUIREMENTS MATRICES

MATRIX 2

COMMERCIAL MANUAL DELIVERY REQUIREMENTS MATRIX FOR (System/Items)

<u>DELIVERY SCHEDULE</u>			
Delivery Formats ⇨	Approved Commercial Manuals	Updates/Source Data/Supplemental Manuals	Reproduction Media
Data Delivery Required ⇨	(_ _)Days Prior to Equipment	Concurrent to or Prior to Basic Manuals	(_ _) Days Prior to Need Date (or PCO Direction.
Enter Office Symbol and Address ↓	Enter Copy Quantities Required ↓ ↓ ↓		
Total Copies Required:			

Note: Deliverables include updates as required

PART C - STANDARDIZATION DOCUMENT TAILORING

GENERAL REQUIREMENTS

Notes:

- Most specification “Acquisition Requirements” list the same two items for paragraphs 6.2a and 6.2b. For this contract, the answers are:
6.2a. The title, number and date of each specification will be listed in the heading of the applicable SIR.
6.2b. The issue of the DODISS used in this contract is (date).
- All specifications applicable to this contract will have an appropriately tailored SIR attached to this section of the TMCR.
- Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.

STANDARDIZATION INTERFACE RECORD FOR

MIL-STD-1840B

3 November 1992

Automated Interchange of Technical Information

Note: Tailoring out digital requirements may result in parsing failure of the delivered files. All such tailoring must be coordinated with the specification preparing activity! Program-specific tailoring of (para 6.2) must be added to this SIR.

4.2 The transfer unit shall be encoded in an appropriate format for the type of transfer unit specified below.

4.2.1 Page image transfer units will only be used for raster-scanned (non-changeable) documents used to update relatively stable legacy (existing) data.

4.2.1 c Special word files shall not be used; if changes to AF DTDs or FOSIs are required and authorized, the contractor shall submit a revised DTD or FOSI.

4.2.2 Page Description Language (PDL) transfer units will only be used to update volatile (changeable) legacy data using a commercial word processing format. **NOTE:** The preferred AF PDL is an Adobe™ Portable Document Format (PDF) file indexed in accordance with the AF Digital Data Strategy (<http://www.pdsm.wpafb.af.mil>).

4.2.3 Standard AF DTDs (appended to the prescribed TM specifications) shall be used, when possible. The PUBLIC identifier shall be identified in the SGML document transfer unit. If no DTD is appended to the relevant MILSPEC, contact Det 2, HQ ESC/AV-2, through the Procuring/Administrative Contracting Officer (PCO/ACO) and the TO Management Agency, to obtain permission to develop a program-specific DTD.

4.2.3b Document type declaration files are not required if the file is in standard AF DTD format and the document type is obvious upon file inspection.

4.2.3d SGML text entity files developed as a result of AF DTD modification shall be included. PUBLIC SGML text entity files shall NOT be used.

4.2.3e Each illustration in the file shall be delivered in one of the following formats: IGES, Raster, or CGM. All formats may be used within any one document, depending upon the various types of illustrations used.

Note: This is not intended to prevent delivery of an “intelligent raster” illustration, i.e., one with an IGES overlay to facilitate changes to the raster image.

PART C - STANDARDIZATION DOCUMENT TAILORING

4.2.3f Standard AF FOSIs (available electronically as GFI from the AF TMSS OPR) shall be used, when possible, for paper output products. The PUBLIC identifier shall be identified in the SGML document transfer unit. If no FOSI is available for the relevant MILSPEC, or for digitally-displayed data, contact Det 2, HQ ESC/AV-2, through PCO/ACO and the TO Manager, to obtain permission to develop a program-specific FOSI.

4.2.3g Special word files shall not be used; if changes to AF DTDs or FOSIs are required and authorized, the contractor shall submit a revised DTD or FOSI.

4.2.3h Contract defined data files shall be included in the transfer unit if quantities and capacities deviate from MIL-PRF-2800 1 (see paragraph 4.4.9).

4.2.4 Product data transfer units will only be used for engineering data files.

4.2.5 Delete.

4.4.1 Page image data files shall be in accordance with MIL-PRF-28002 for raster image files (see SIR paragraph 4.2.1 and the NOTE for paragraph 4.2.3e).

4.4.2 Special word files shall not be used.

4.4.5 Replace the 1st sentence with: Text source data files shall be SGML encoded ASCII text files, tagged in accordance with the standard AF DTDs (see paragraph 4.2.3).

4.4.6 Delete.

4.4.7 When there are multiple uses for the same illustration within a single document, submit only one illustration data file.

4.4.7.1 IGES Class I, Technical Illustration Subset, will normally be used in preference to Class II or Class III (see SIR for MIL-PRF-28000).

4.4.7.2 The contractor shall obtain government approval before including raster illustration data files, except in page image transfer units provided in raster format only.

4.4.8 Change to read: "FOSI data files shall be in accordance with standard AF FOSIs and shall define the style and display format of the document according to the applicable specification (see paragraph 4.2.3f)."

4.4.9 Replace with: "Contract defined data files. This file shall be used to provide the appropriate SGML declaration [Federal Information Processing Standard (FIPS) 152]. The file shall be submitted in ASCII."

4.4.10 through 4.4.12 Delete.

4.4.13 Renumber as 4.4.7.4. Replace requirements with: "Use of half-tone or color illustrations shall be as specified in the applicable TM specification."

5.3.2g Replace with: "DTD Revisions. A DTD revision shall be included any time the standard AF DTD must be modified. Prior Det 2, ESC/AV-2 approval for the modification is required."

5.4.2 The type of alternative medium shall be specified by the government.

5.5.3 Packaging instructions for alternative media shall be provided by the government.

6.3 Tailoring Guidance. *The following list of paragraphs may require additional tailoring: 4.2, 4.2.43 (if used), 4.4.3 (if used), 4.4.4, 4.4.11 (if used), 5.3.2 (if types not listed are required), 5.4 (transfer package layout on medium), 5.4.2 (specify media if not 9-track tape), and 5.5.3 (if non-listed computer media are specified). The TO acquisition manager must coordinate tailoring with the sustainment TO management office and the contractor to ensure requirements are realistic and supportable. DELETE this italicized paragraph during tailoring.*

PART C - STANDARDIZATION DOCUMENT TAILORING

STANDARDIZATION INTERFACE RECORD FOR

MIL-PRF-28000A

10 February 1992

Digital Representation for Communication of Product Data:
IGES Application Subsets and IGES Application Protocols

Note: Program-specific tailoring of (para 6.2) must be added to this SIR.

Each illustration shall be submitted in only one of the three approved graphics formats (IGES, Raster, or CGM).

6.2c. The type of product data procured will be Class I - Technical Illustration Subset. If Class II or Class III products are being procured for other program purposes (such as engineering drawings), and these products are suitable for TO application, they shall be used instead of duplicating data merely to obtain the Class I product.

STANDARDIZATION INTERFACE RECORD FOR

MIL-PRF-28001B

26 June 1993

Markup Requirements and Generic Style Specification for
Electronic Printed Output and Exchange of Text

Note: Used for Air Force TOs as a reference only. Contact Det 2, HQ ESC/AV-2 if new DTDs are required

STANDARDIZATION INTERFACE RECORD FOR

MIL-PRF-28002B

14 December 1992

Raster Graphics Representation in Binary Format,
Requirements for

Note: Program-specific tailoring of (para 6.2) must be added to this SIR.

Each illustration shall be submitted in only one of the three approved graphics formats (IGES, Raster, or CGM).

Paragraph 6.2.1b is not answered in the TMCR.

1.2 (Info only) Type II, Tiled Raster Graphics (the optional choice) are compressed and require less memory space than Type I (Untiled).

PART C - STANDARDIZATION DOCUMENT TAILORING

STANDARDIZATION INTERFACE RECORD FOR

MIL-PRF-28003A
Amendment 1

15 November 1991
10 August 1992

Digital Representation for Communication of Illustration Data:
CGM Application Profile

Each illustration shall be submitted in only one of the three approved graphics formats (IGES, Raster, or CGM).

Paragraph 6.2b is not answered by the TMCR.

6.2b. Unless otherwise required by the content specification, only the Type 0 (monochrome) metafile shall be used.

6.2c. *(Tailor)*

STANDARDIZATION INTERFACE RECORD FOR

MIL-STD-38784

2 July 1995

Manuals, Technical: General Style and Format Requirements

Note: Program-specific tailoring of para 6.2 must be added to this SIR.